



IN THE U.S. PATENT AND TRADEMARK OFFICE

#4

In re patent application of

Tanaka

Serial No.: 09/974,793

Group Art Unit: 2661

Filed: October 12, 2001

Examiner: Not Assigned

For: SCHEDULING SYSTEM AND SCHEDULING METHOD FOR THE SAME

Assistant Commissioner for Patents  
Washington, D.C. 20231

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APR 08 2002

Technology Center 2600

Sir:

Submitted herewith are sixteen (16) sheets of formal drawings comprising sixteen (16) figures for the above-identified patent application. Please substitute these drawings for the ones originally submitted.

Respectfully submitted,

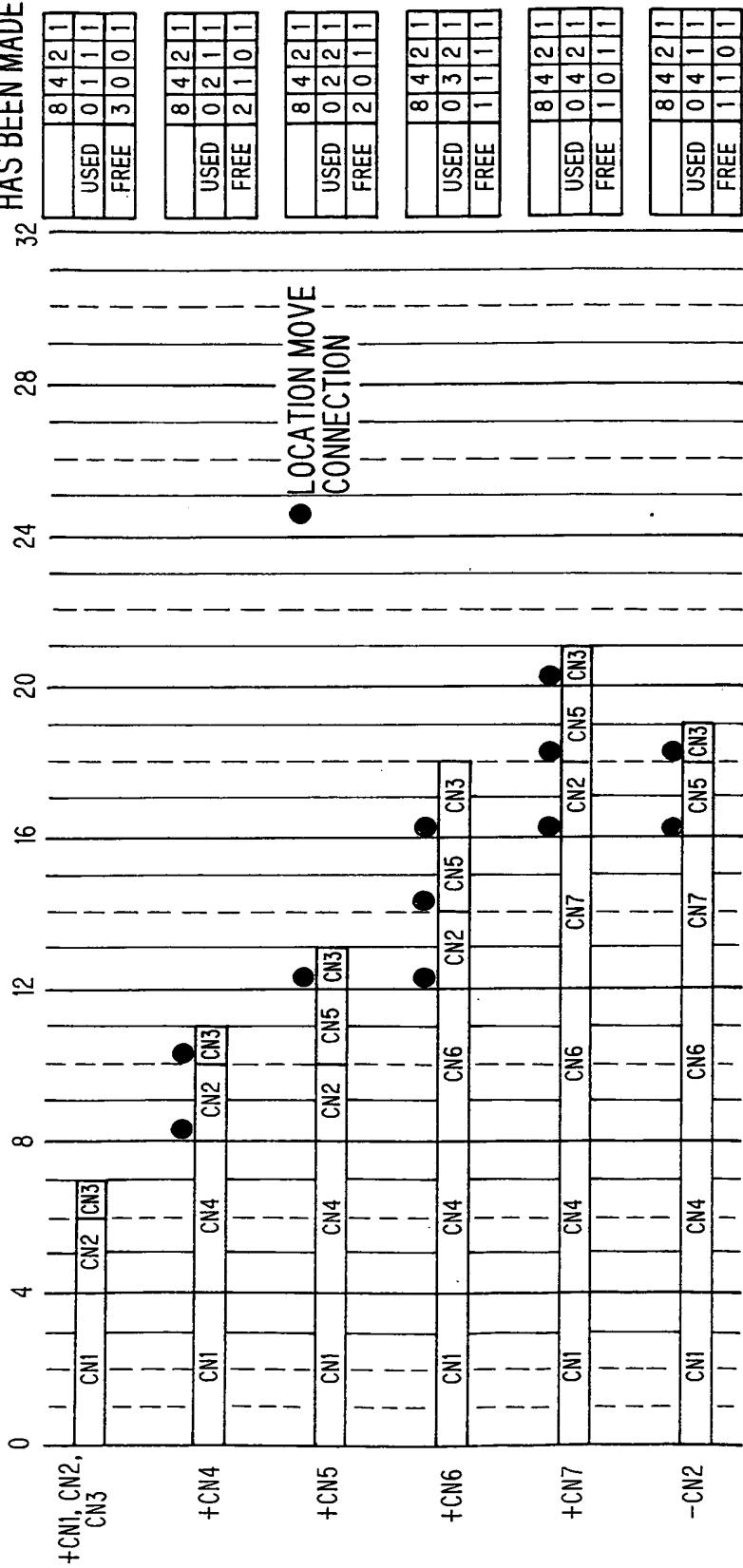
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30743

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FIG. 1 PRIOR ART

TABLE IN WHICH  
CONVERSION AS  
PCR VALUES  
HAS BEEN MADE



TEN(=32)

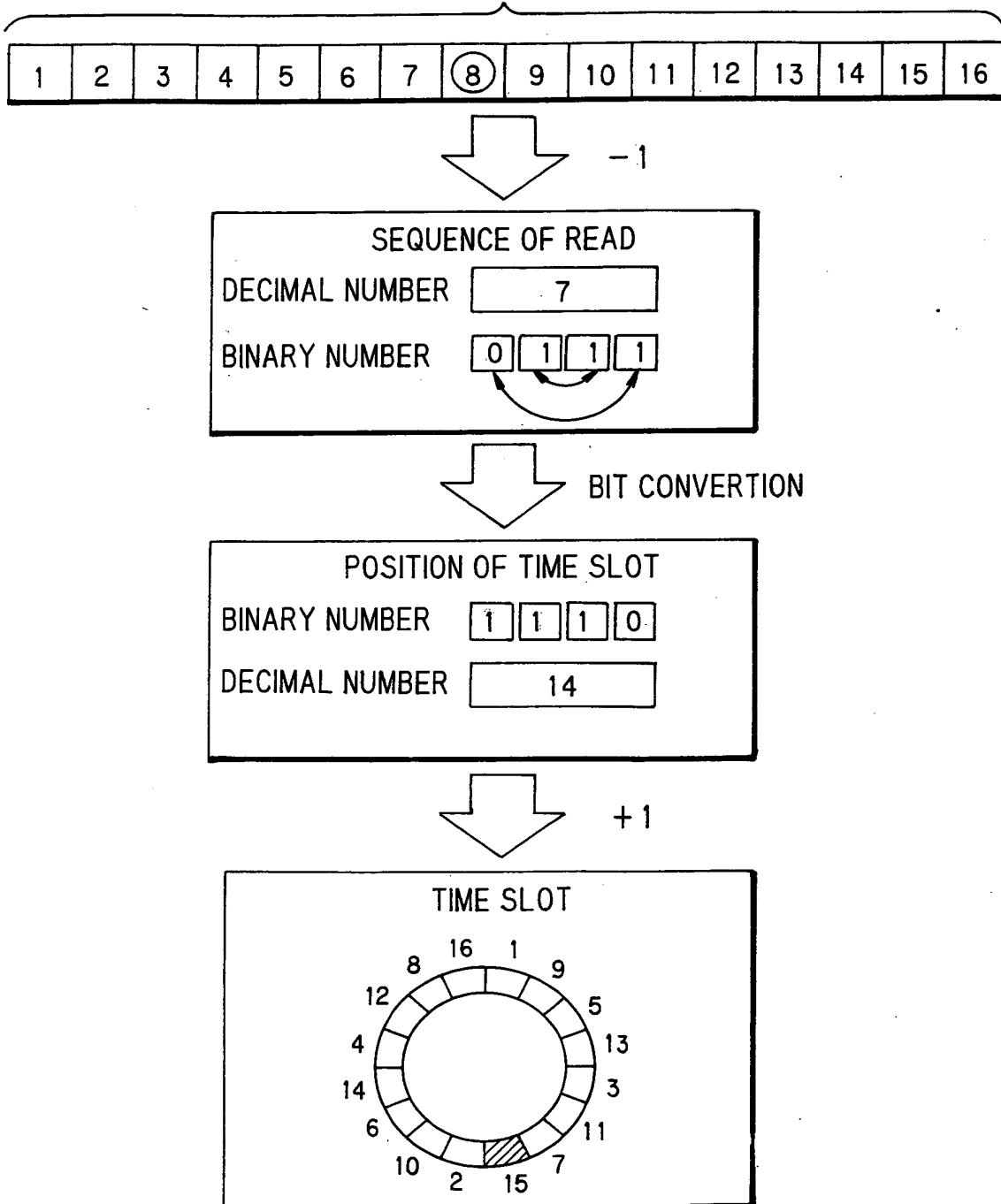
## TEN : TOTAL NUMBER OF ENTRIES

FREE : IDLE AREA

USED : USED AREA  
CN : CONNECTION

## FIG.2 PRIOR ART

IF TABLE LENGTH IS 16, BINARY NUMERAL OF  $\log_2(16) = 4$  DIGITS IS POSSIBLE



### FIG. 3 PRIOR ART

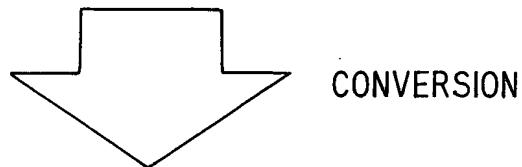
MANAGEMENT TABLE	REARRANGEMENT				POSITION OF TIME SLOT
	(DECIMAL)	(BINARY)	(BINARY)	(DECIMAL)	
1	0	0 0 0 0	0 0 0 0	0	1
2	1	0 0 0 1	1 0 0 0	8	9
3	2	0 0 1 0	0 1 0 0	4	5
4	3	0 0 1 1	1 1 0 0	12	13
5	4	0 1 0 0	0 0 1 0	2	3
6	5	0 1 0 1	1 0 1 0	10	11
7	6	0 1 1 0	0 1 1 0	6	7
8	7	0 1 1 1	1 1 1 0	14	15
9	8	1 0 0 0	0 0 0 1	1	2
10	9	1 0 0 1	1 0 0 1	9	10
11	10	1 0 1 0	0 1 0 1	5	6
12	11	1 0 1 1	1 1 0 1	13	14
13	12	1 1 0 0	0 0 1 1	3	4
14	13	1 1 0 1	1 0 1 1	11	12
15	14	1 1 1 0	0 1 1 1	7	8
16	15	1 1 1 1	1 1 1 1	15	16

## FIG. 4 PRIOR ART

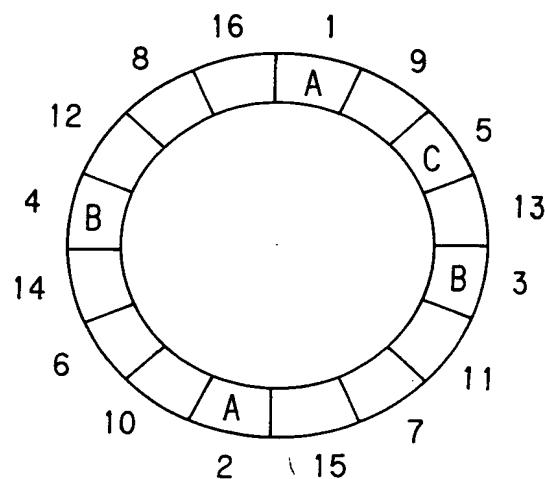
CELL READ SEQUENCE MANAGEMENT TABLE

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----

A      B      C

$$\begin{pmatrix}
 A \text{ (PCR=2)} \\
 B \text{ (PCR=2)} \\
 C \text{ (PCR=1)}
 \end{pmatrix}$$


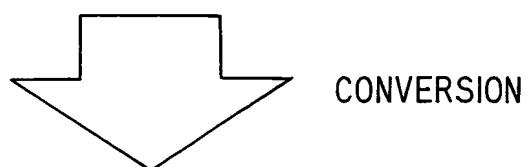
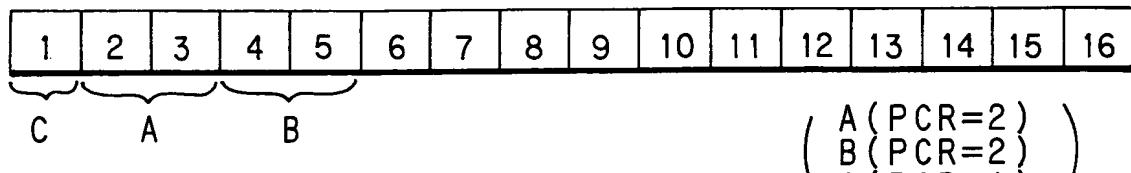
TIME SLOT



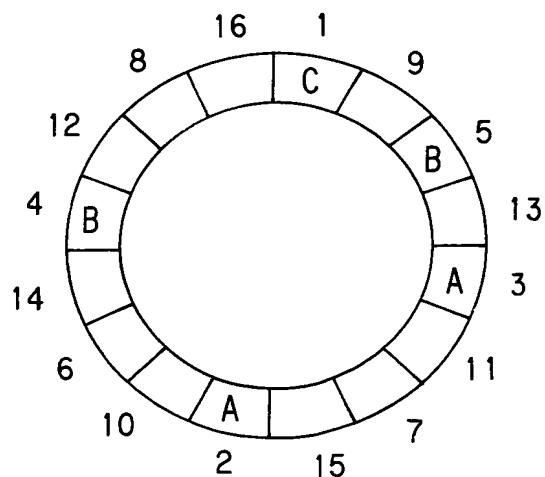
A, B, C : ATM LINE

## FIG.5 PRIOR ART

CELL READ SEQUENCE MANAGEMENT TABLE



TIME SLOT

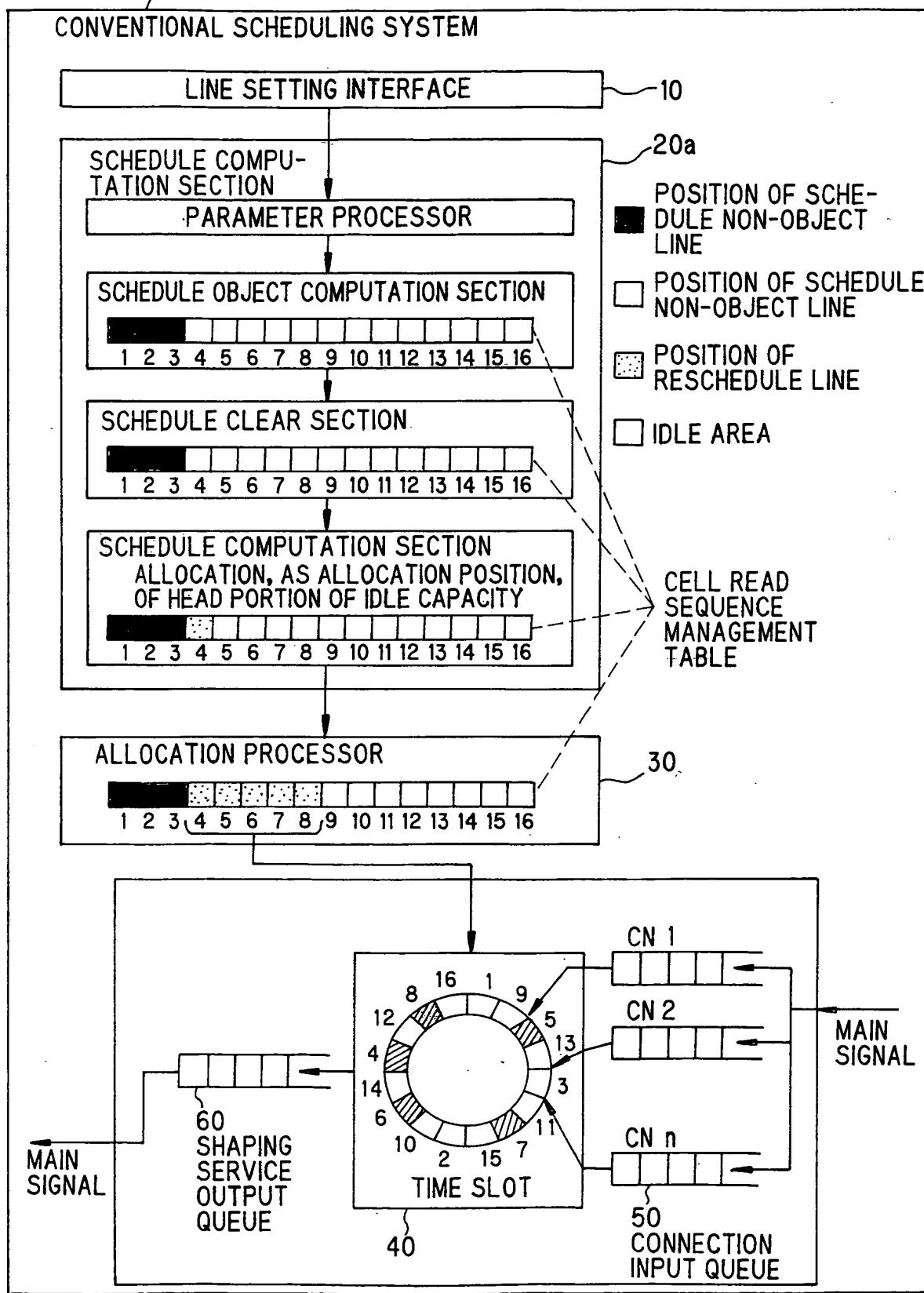


A, B, C : ATM LINE

100a

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## FIG. 6 PRIOR ART



100

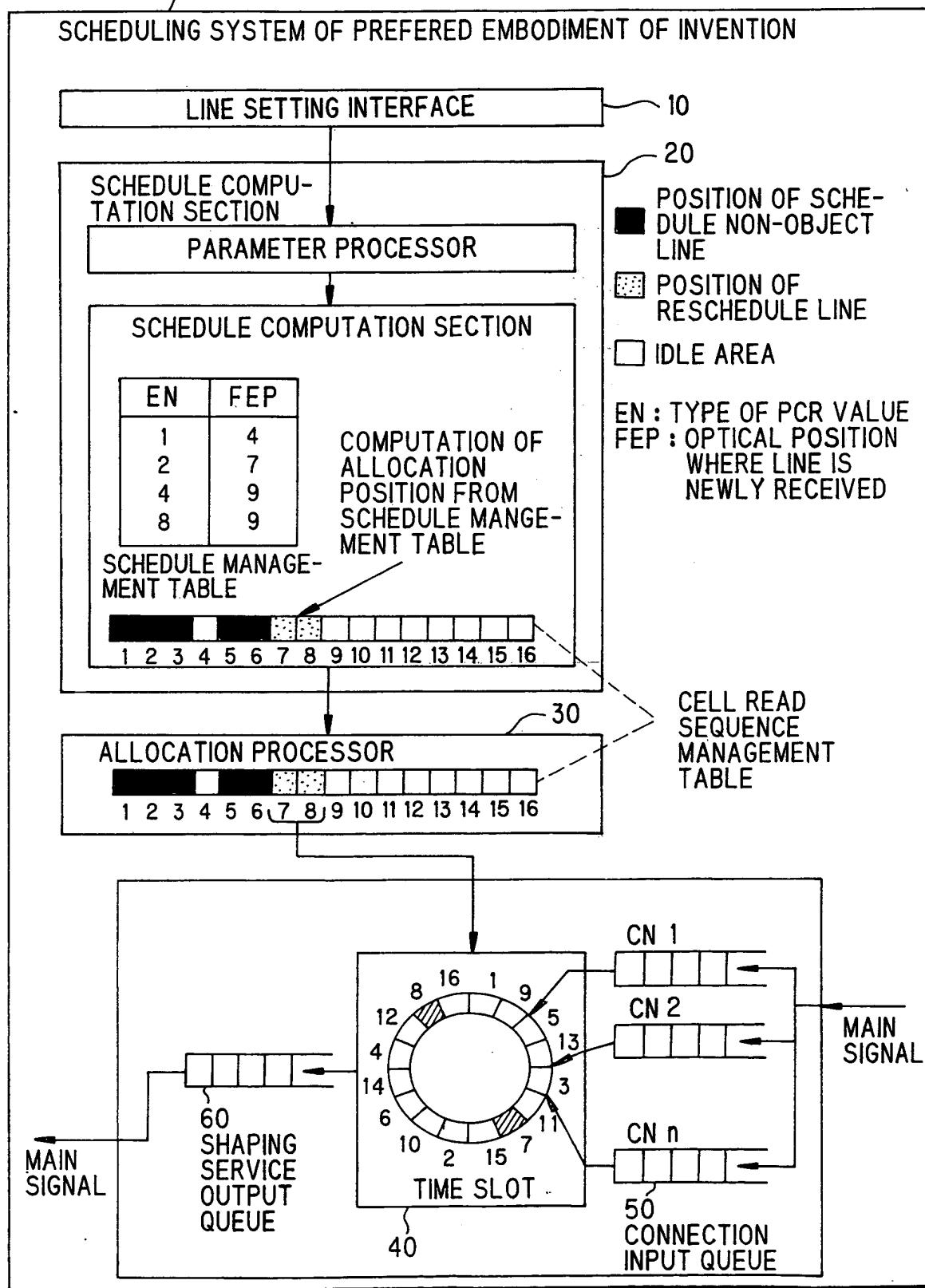
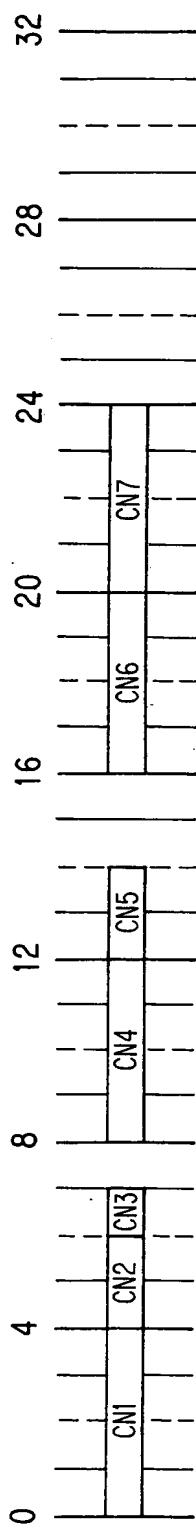
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FIG. 7

FIG. 8



$$\left\{ \begin{array}{l} \text{TEN} = 32 \\ \text{TUEN} = 21 \\ \text{TUEB} = 24 \end{array} \right.$$

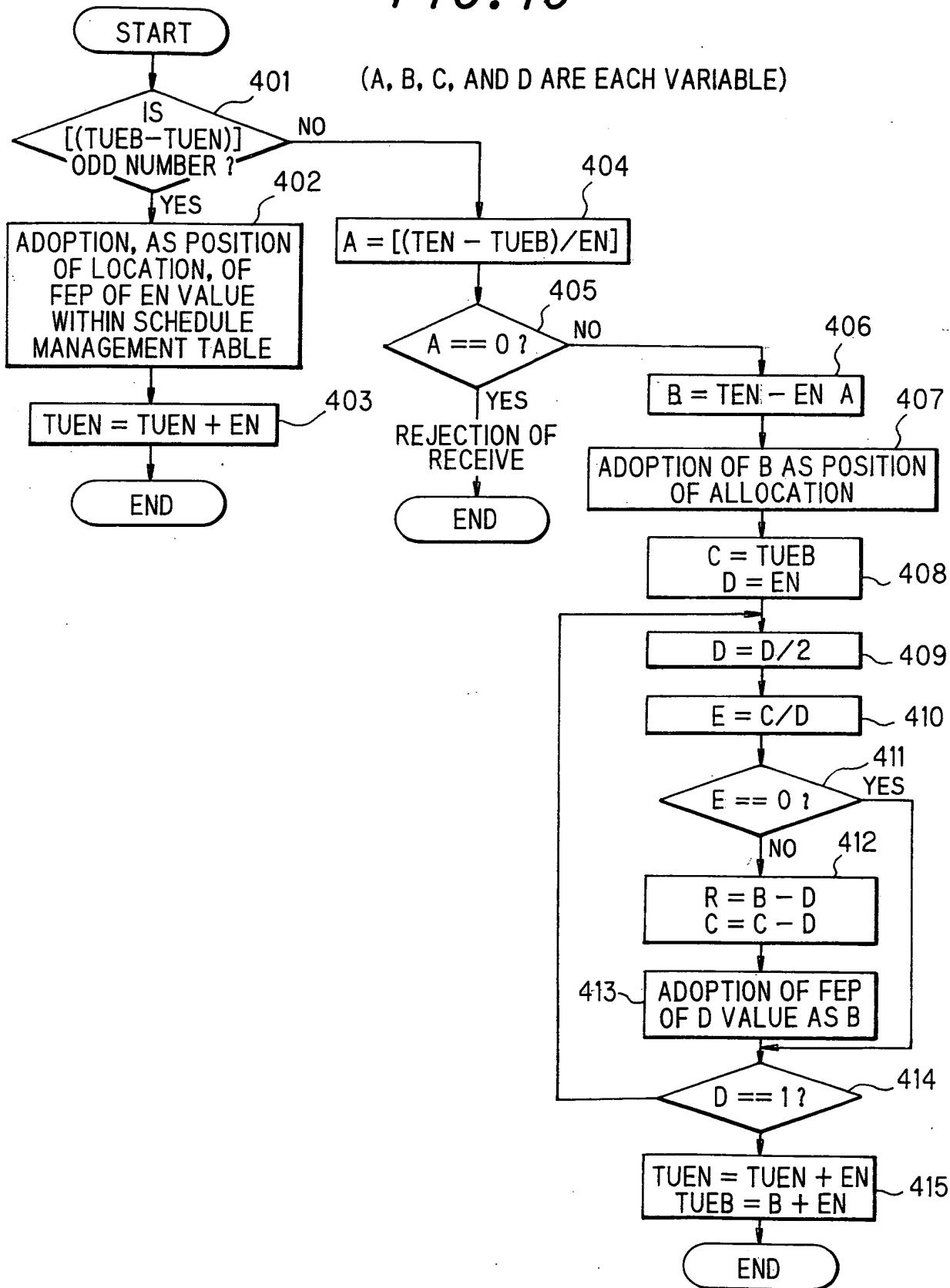
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## FIG.9

EN	FEP
1	8
2	15
4	25
8	25

EN : TYPE OF PCR VALUE  
FEP : OPTICAL POSITION WHERE LINE  
IS NEWLY RECEIVED

FIG. 10



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FIG. 11

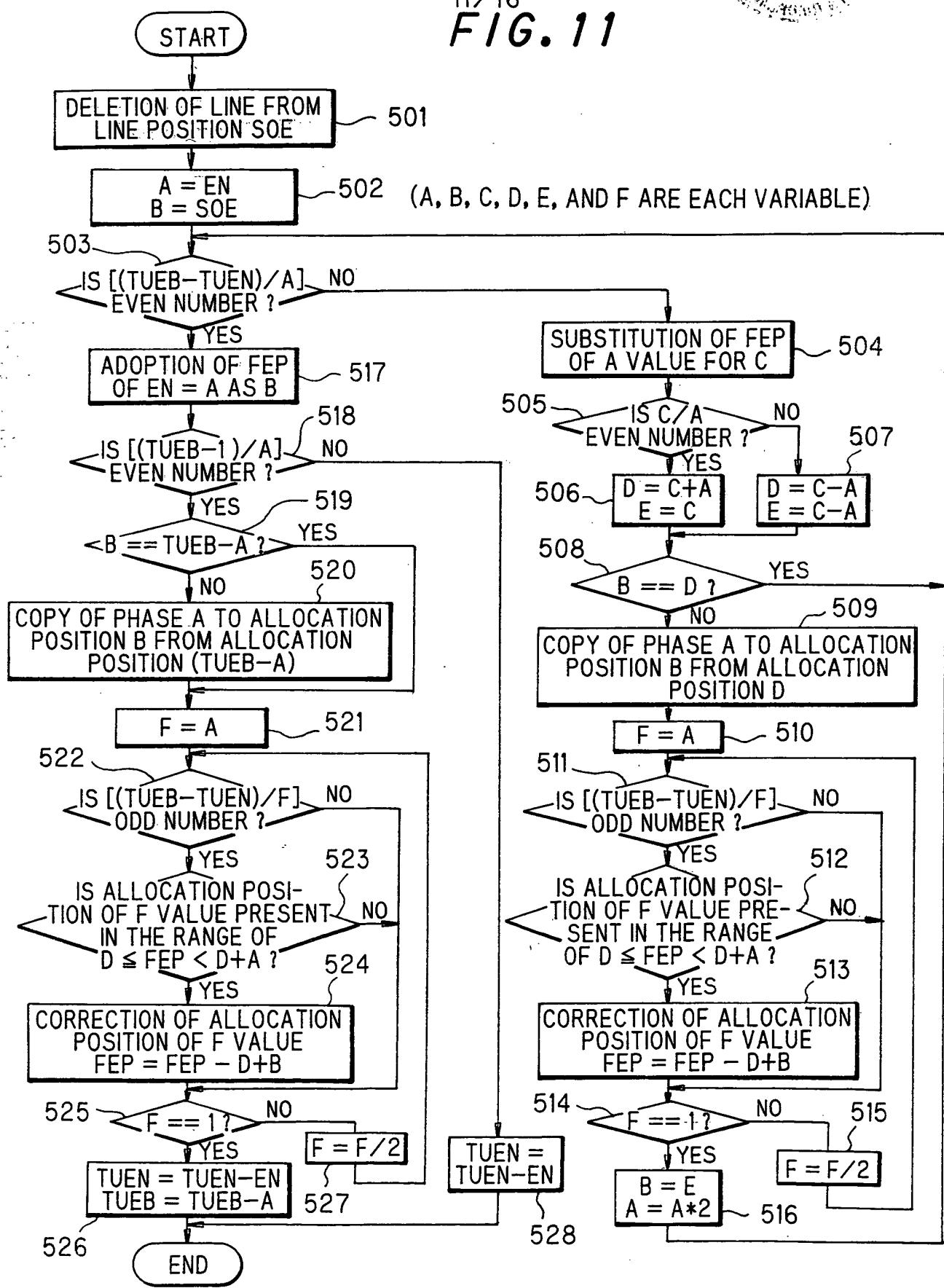
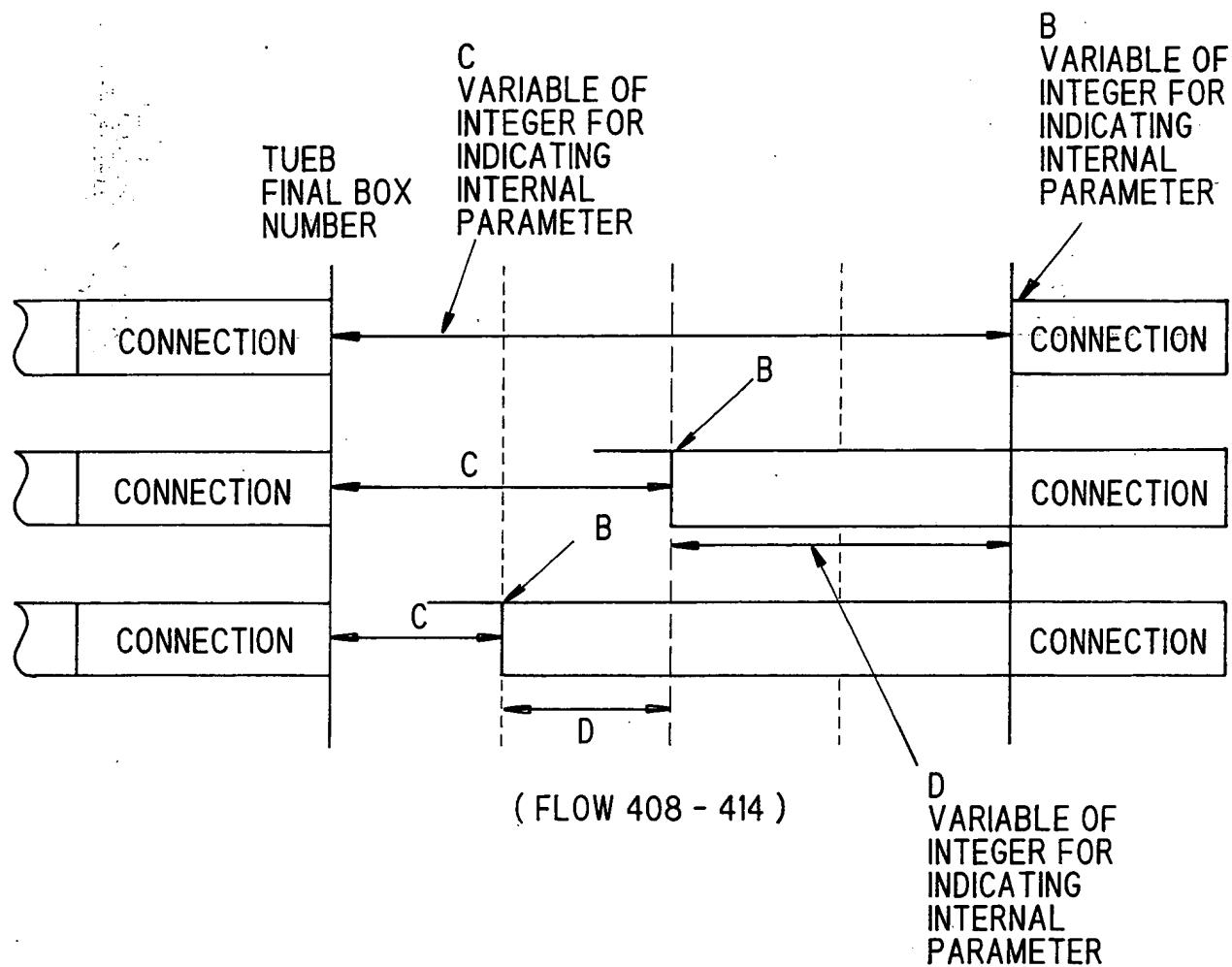


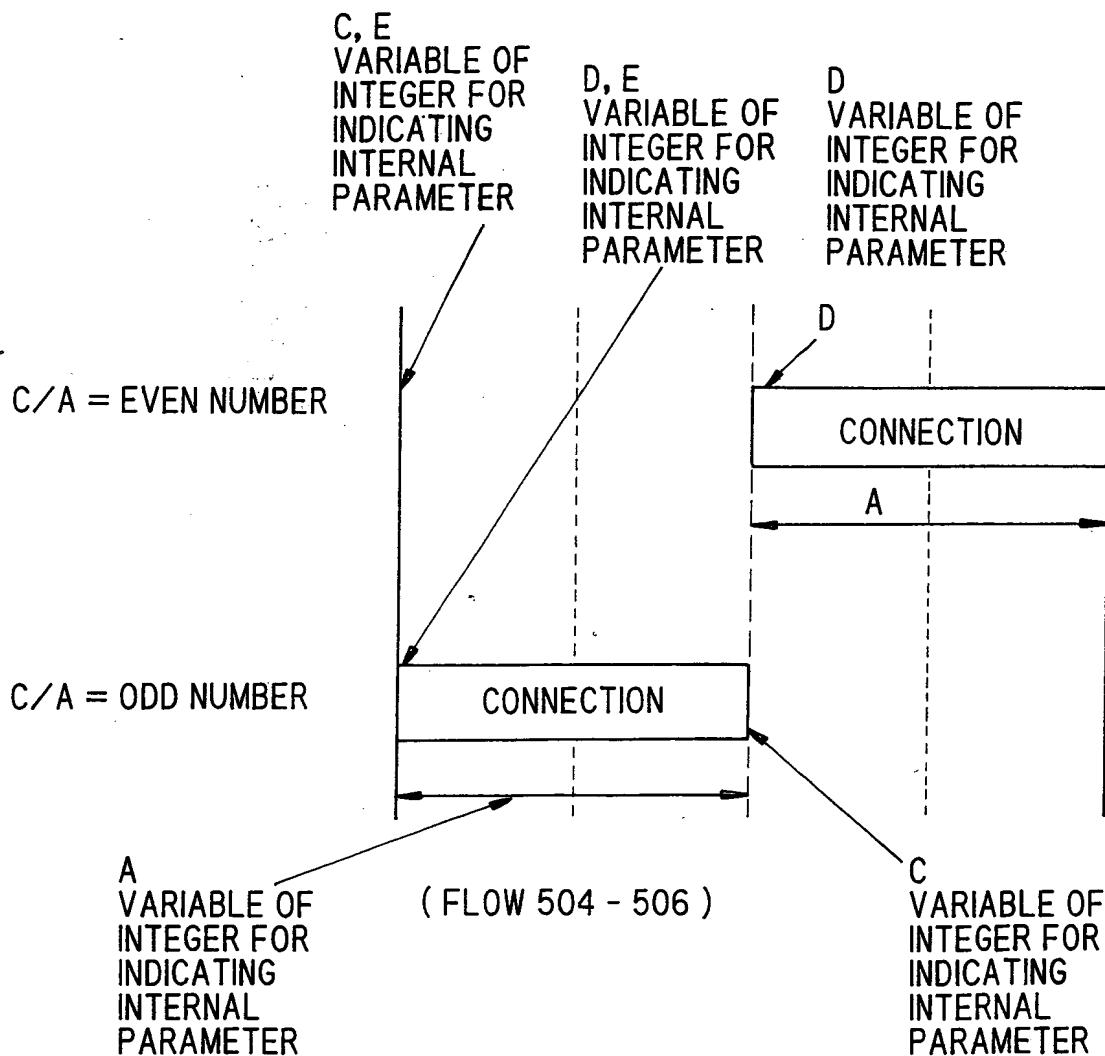
FIG. 12

## SCHEDULING OF CELL READ SEQUENCE MANAGEMENT TABLE



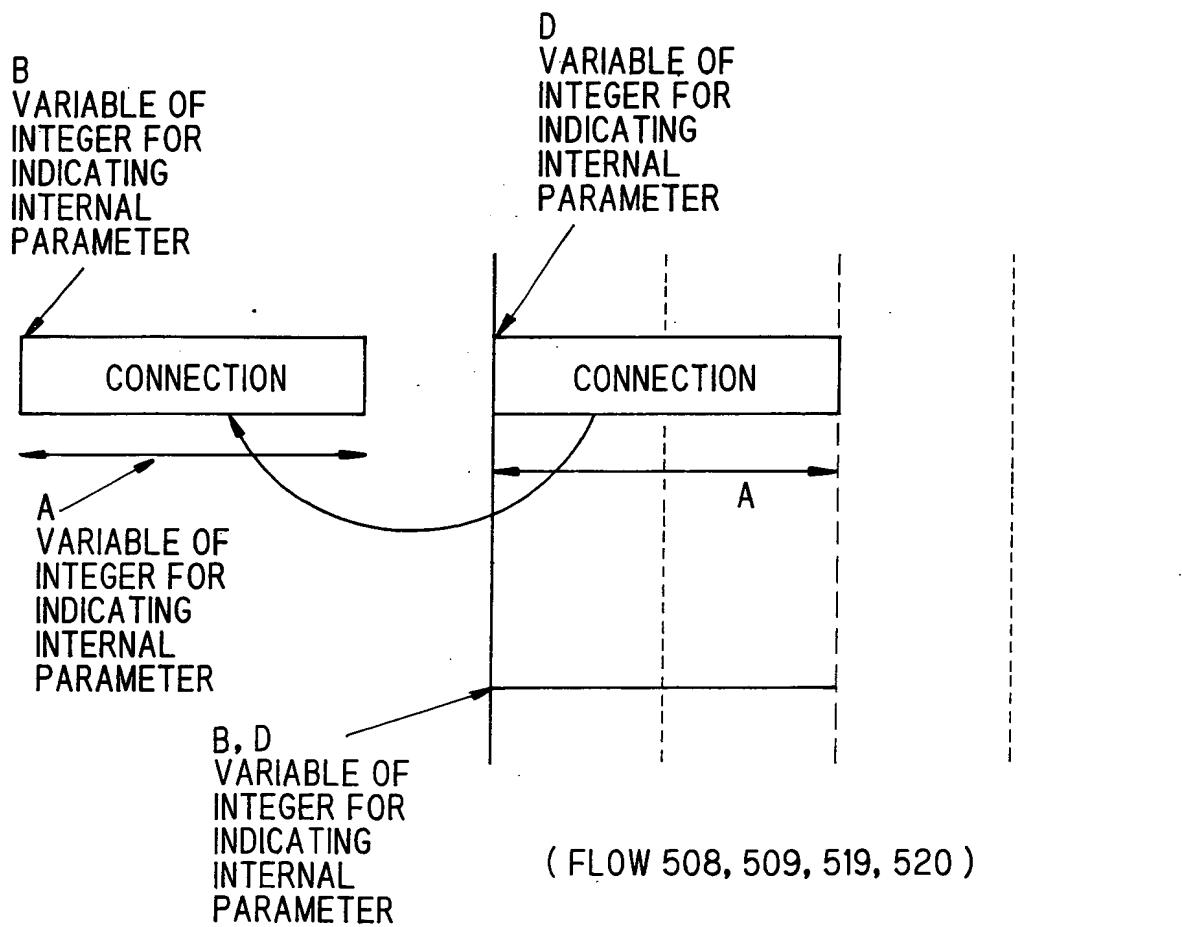
## FIG. 13

## SCHEDULING OF CELL READ SEQUENCE MANAGEMENT TABLE



## FIG. 14

## SCHEDULING OF CELL READ SEQUENCE MANAGEMENT TABLE



## FIG. 15

## SCHEDULING OF CELL READ SEQUENCE MANAGEMENT TABLE

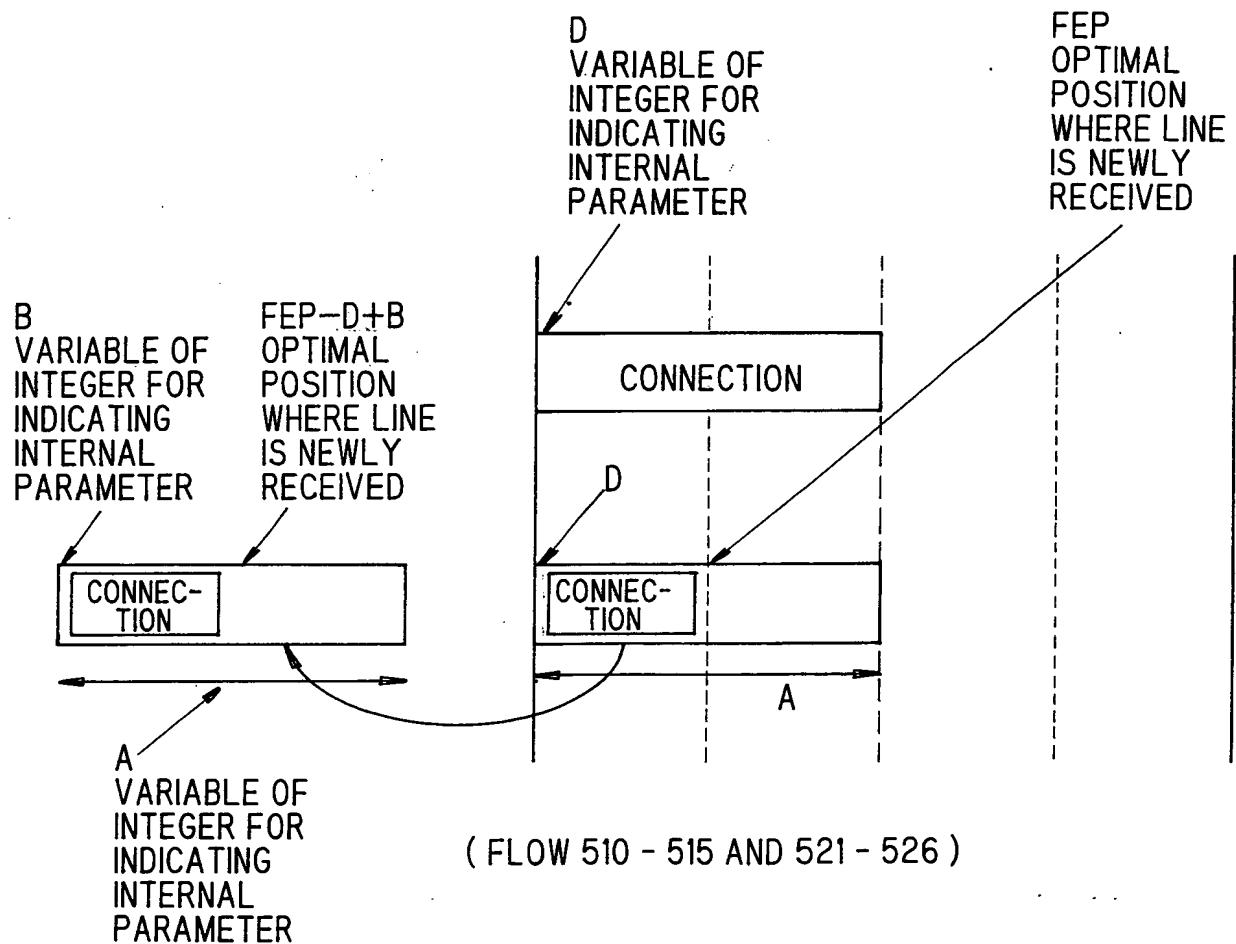


FIG. 16

(TUEN, TUEB)

	0	4	8	12	16	20	24	28	
+CN1, CN2, CN3									
	CN1	CN2	CN3	( 7, 7 )					
+CN4	CN1	CN2	CN3						
				CN4	( 11, 12 )				
+CN5	CN1	CN2	CN3						
				CN4	CN5	( 13, 14 )			
+CN6	CN1	CN2	CN3						
				CN4	CN5	CN6	( 17, 20 )		
+CN7	CN1	CN2	CN3						
				CN4	CN5	CN6	CN7	( 21, 24 )	
-CN2	CN1	CN2	CN3						
				CN4		CN6	CN7	( 19, 24 )	

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TABLE IN WHICH  
CONVERSION AS  
PCR VALUES  
HAS BEEN MADE

● LOCATION MOVE  
CONNECTION

TEN(=32) TUEN: TOTAL NUMBER OF ENTRIES  
TUEB: FINAL BOX NUMBER  
TEN: TOTAL NUMBER OF ENTRIES  
FREE: IDLE AREA  
USED: USED AREA  
CN: CONNECTION

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